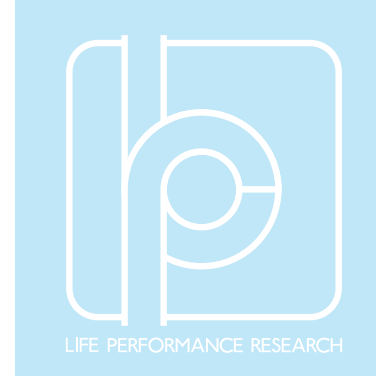


LPMS-CU2



LPMS Wired Miniature Motion Sensor / IMU / AHRS with CAN Bus and USB Connectivity

The LPMS-CU2 is an innovative and high performance miniature motion sensor. Integrating CAN Bus and USB interfaces into one unit, the LPMS-CU2 perfectly fits both machine and human motion measurements for size and cost sensitive applications.

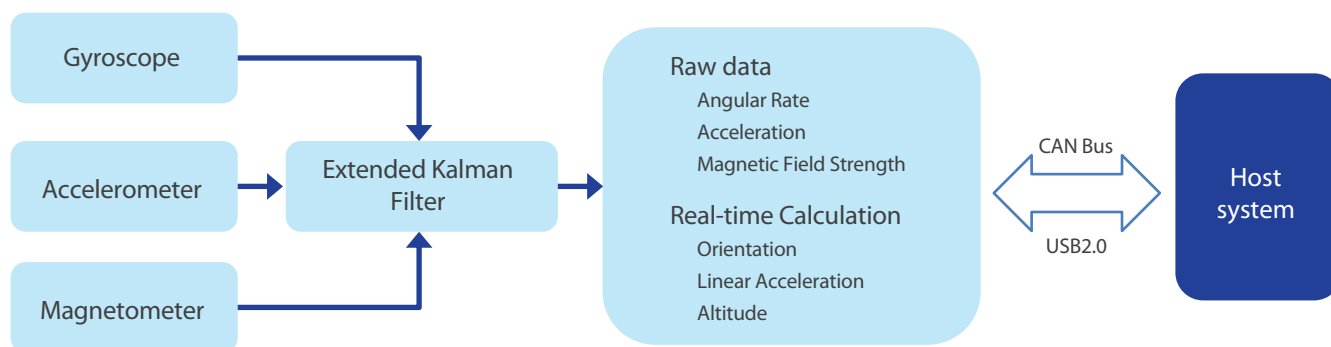


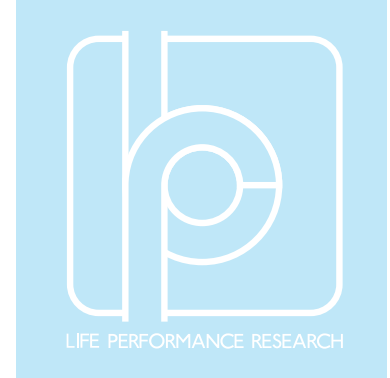
Key Features

- MEMS miniature inertial measurement unit (IMU)
- Integration of 3-axis gyroscope, accelerometer, magnetometer, temperature and barometric pressure sensor in one unit
- Real-time, on-device calculation of sensor orientation, linear acceleration and altitude
- Data output rates of up to 400Hz
- Variety of wired interfaces: CAN Bus and USB
- Control applications and SDK for Windows, Linux

Applications

- Manipulator balance control
- Driving navigation
- Racing car status monitoring
- Robot arm control

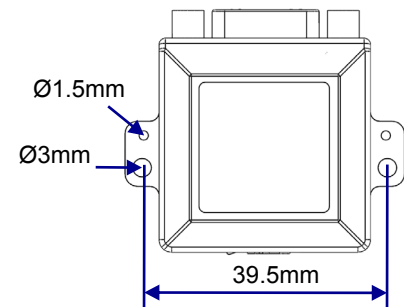
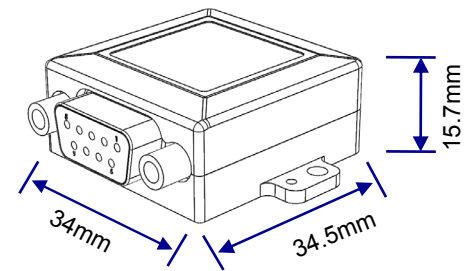




Sensor Specifications

Wired interface	CAN Bus	USB
Max. baudrate	1Mbit/s	921.6Kbit/s
Communication protocol	LpCAN/ CANOpen	LpBus
Size	34 x 34.5 x 15.7 mm	
Weight	17.6g	
Orientation range	Roll: $\pm 180^\circ$; Pitch: $\pm 90^\circ$; Yaw: $\pm 180^\circ$	
Resolution	< 0.01°	
Accuracy	< 0.5° (static), < 2° RMS (dynamic)	
Accelerometer	3-axis, $\pm 2 / \pm 4 / \pm 8 / \pm 16$ g, 16 bits	
Gyroscope	3-axis, $\pm 125 / \pm 245 / \pm 500 / \pm 1000 / \pm 2000$ dps, 16 bits	
Magnetometer	3-axis, $\pm 4 / \pm 8 / \pm 12 / \pm 16$ gauss, 16 bits	
Pressure sensor	300-1100 hPa	
Data output format	Raw data / Euler angle / Quaternion	
Data output rate	up to 400Hz	
Power consumption	< 165 mW@3.3V	
Power supply	5 V ~ 18 V DC	5 V DC
Connector	DB9 female	Micro USB-B
Case material	ABS Plastic shell	
Temperature range	- 40 ~ +80°C	
Software	C++ library for Windows, LpmsControl software and Open Motion Analysis Toolkit (OpenMAT) for Windows.	

Mechanical drawing



Package

- LPMS-CU2 sensor x 1
- User guide card x 1
- Cable x 1
- Box x 1
- Warranty (1 year)



LpmsControl Utility Software

